

# Quelle Technischer Kundendienst

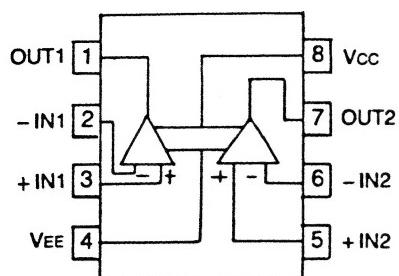
037.2375



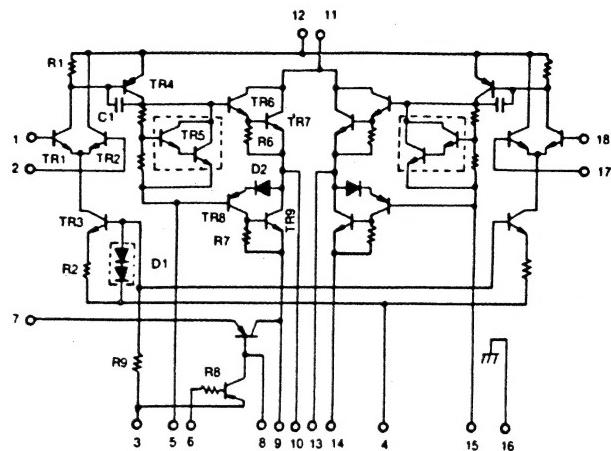
BESTELL-NR.	0372375
GERÄETEBEZEICHNUNG	UNIV.-HIFI-SET
WARENGATTUNG	653
AUSFÜHRUNGS-NR.	001
GERÄETEBESCHREIBUNG	
PRIVILEG	VTC 4391
LIEFERANTEN-NR.	201888
PREIS	599.00
KATALOG	893
GARANTIEZEIT	6
KD-SEKTOR	R
HEIM/BRINGE	WERKSTATT
BETREUUNG	EIGEN
KOSTENTRÄGER	EIGEN
REPARATURFAEHIG	JA

# IC EQUIVALENT CIRCUITS

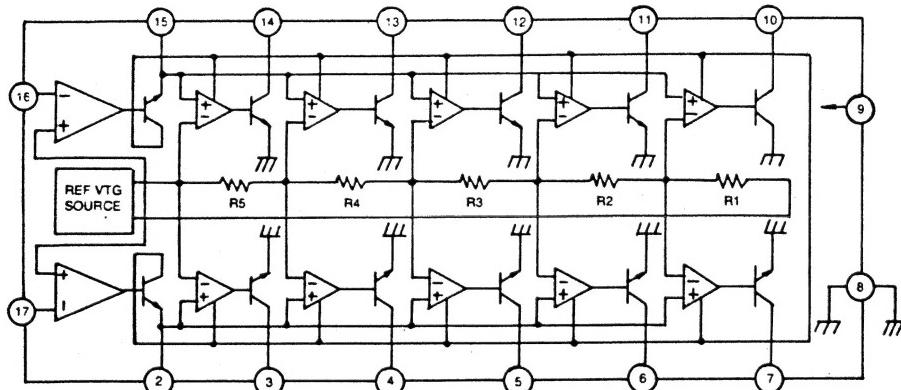
IC101, 201 KIA75558P (Dual op Amp.)



IC401 STK4171 (Power)



IC301, 302 KA2281 (Dual 5 Dot LED Drive)



## NAMES OF CONTROL PARTS

- 1** POWER Switch
- 2** TONE Controls — BASS & TREBLE
- 3** BALANCE Control
- 4** POWER LED LEVEL METER
- 5** FUNCTION INDICATORS  
— PHONO, TUNER, AUX, CD/VDP & TV/VTR
- 6** VOLUME Control
- 7** FUNCTION SELECTOR BUTTONS  
— PHONO, TUNER, AUX, CD/VDP & TV/VTR
- 8** TAPE Button
- 9** TAPE Indicator
- 10** PHONES Jack
- 11** GND Terminal
- 12** Terminals—INPUT, TV/VTR & TAPE
- 13** SPEAKER Terminals
- 14** AC POWER Supply Cord

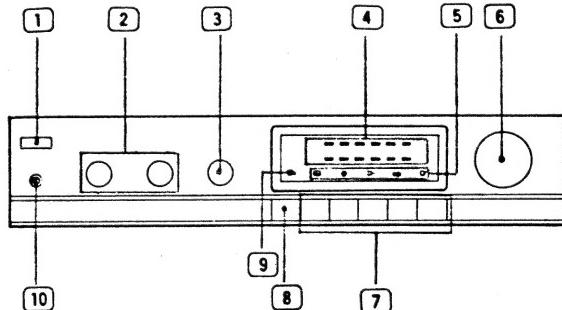


Figure 1 Front View

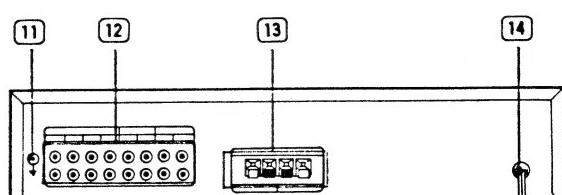
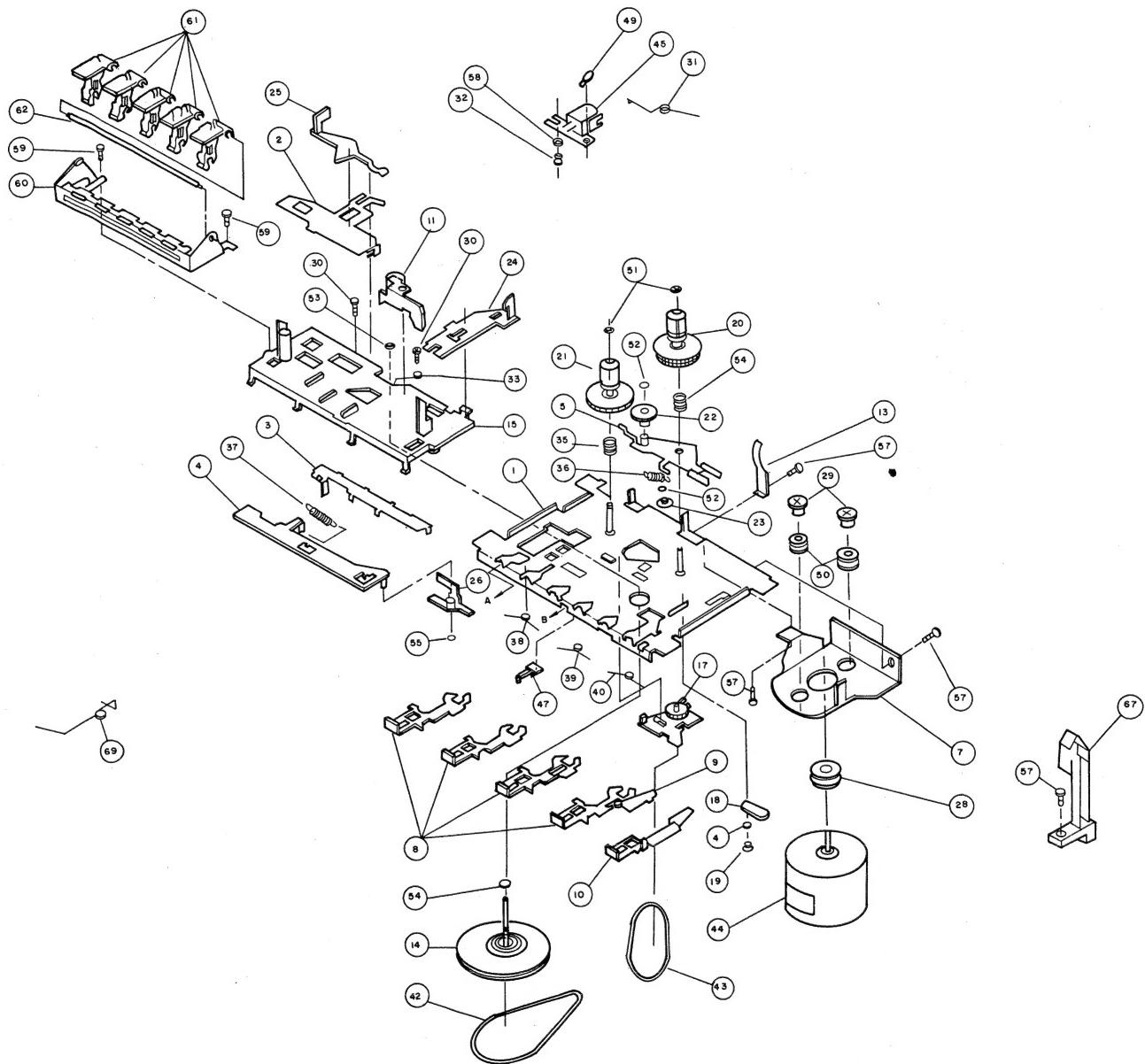


Figure 2 Back View

**EXPLODED VIEW**  
**•PLAYBACK DECK MECHANISM**



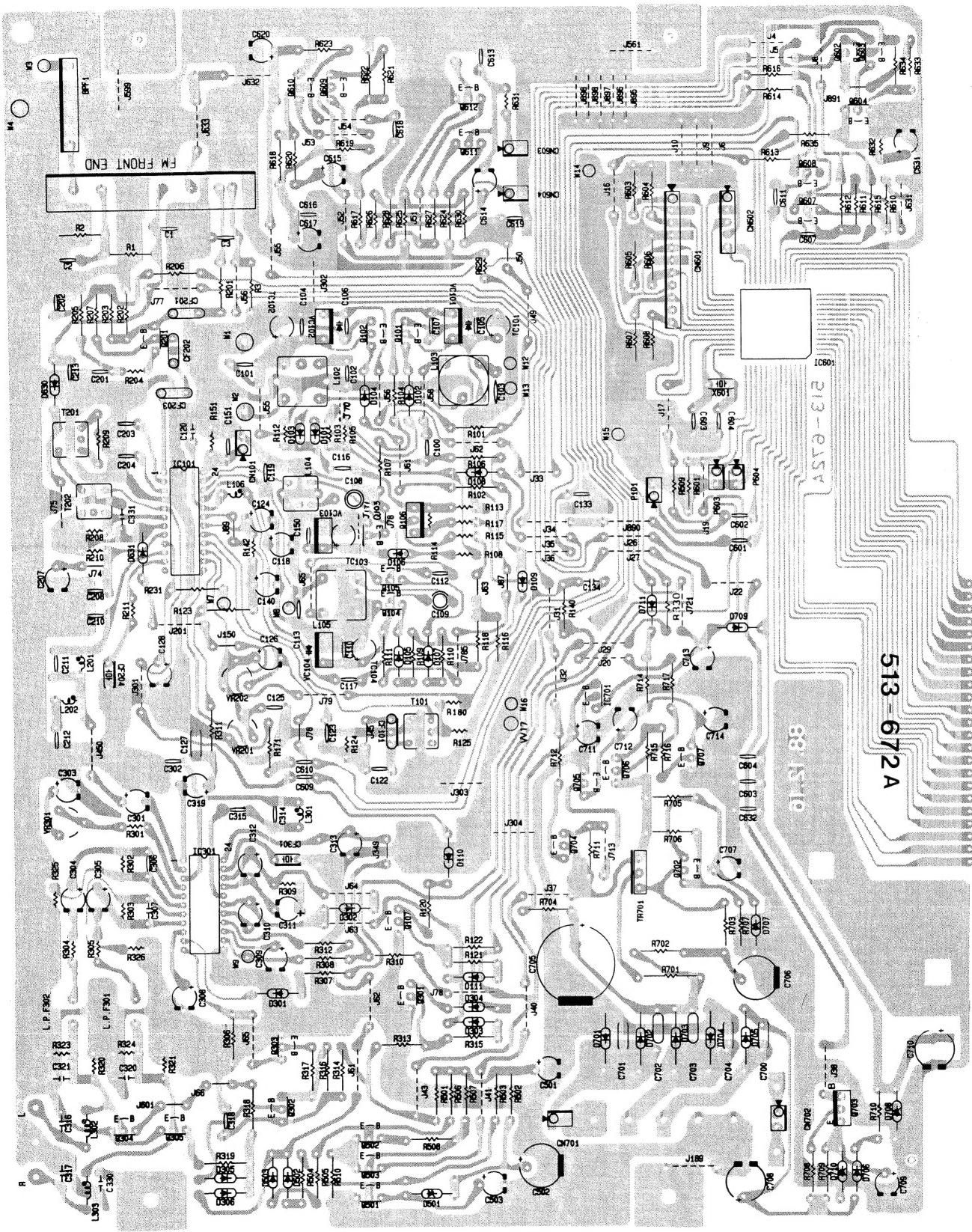
**NOTE:** Excluded parts in the parts list are not available as replacement parts.

# Quelle Technischer Kundendienst

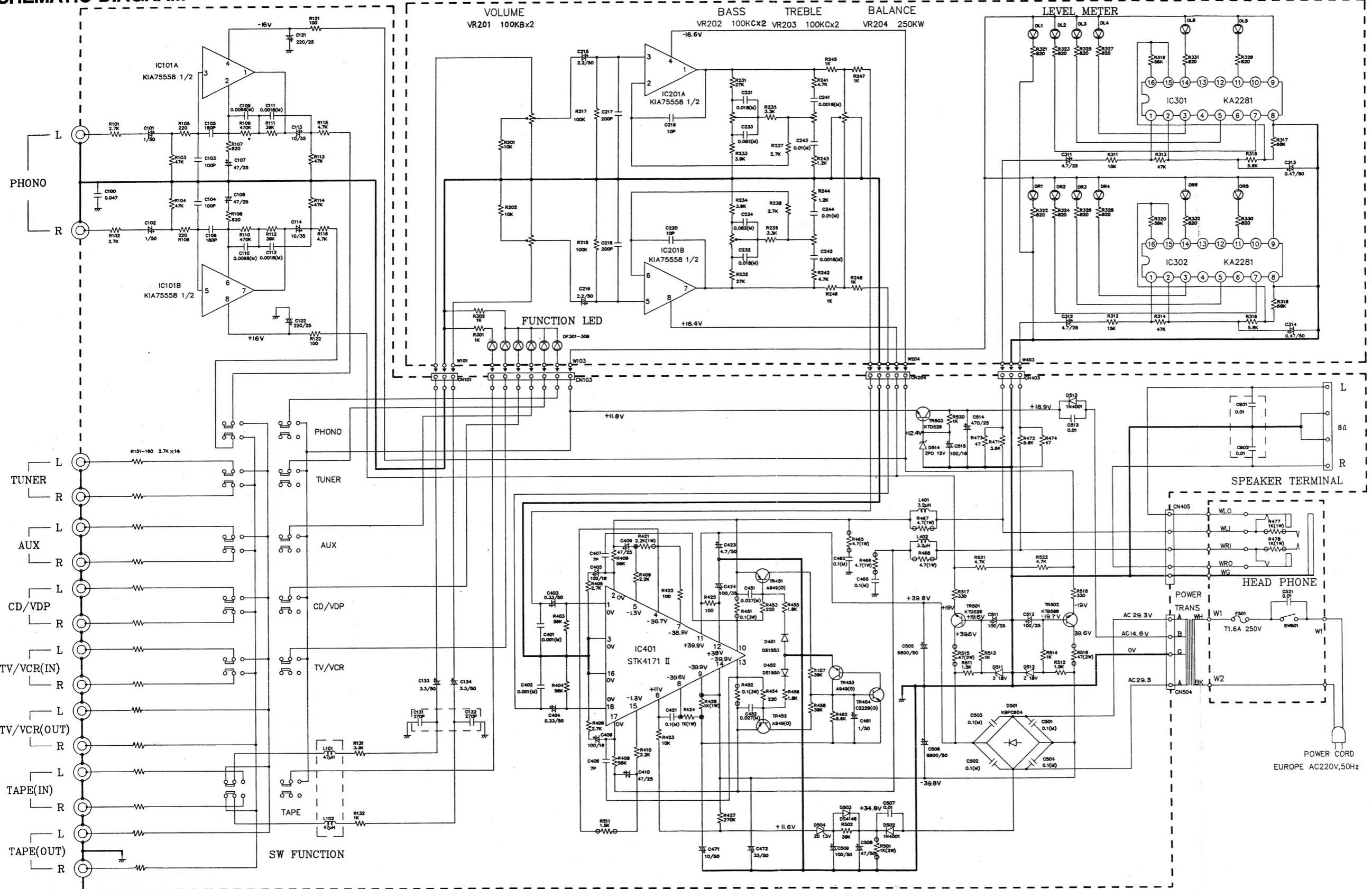
037.2375



BESTELL-NR.	0372375
GERÄETEBEZEICHNUNG	UNIV.-HIFI-SET
WARENGATTUNG	653
AUSFÜHRUNGS-NR.	001
 GERÄETEBESCHREIBUNG	
PRIVILEG	VTC 4391
LIEFERANTEN-NR.	201888
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KD-SEKTOR	R
HEIM/BRINGE	WERKSTATT
BETREUUNG	EIGEN
KOSTENTRÄGER	EIGEN
REPARATURFAEHIG	JA



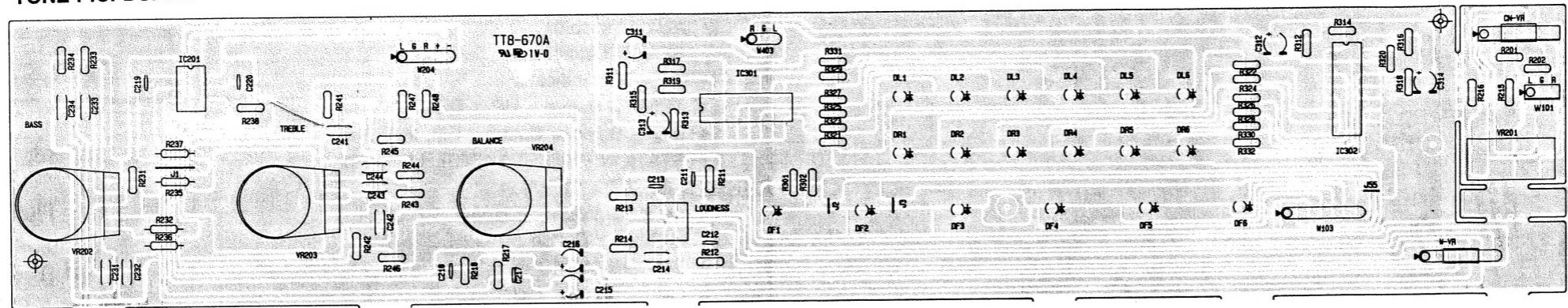
## SCHEMATIC DIAGRAM



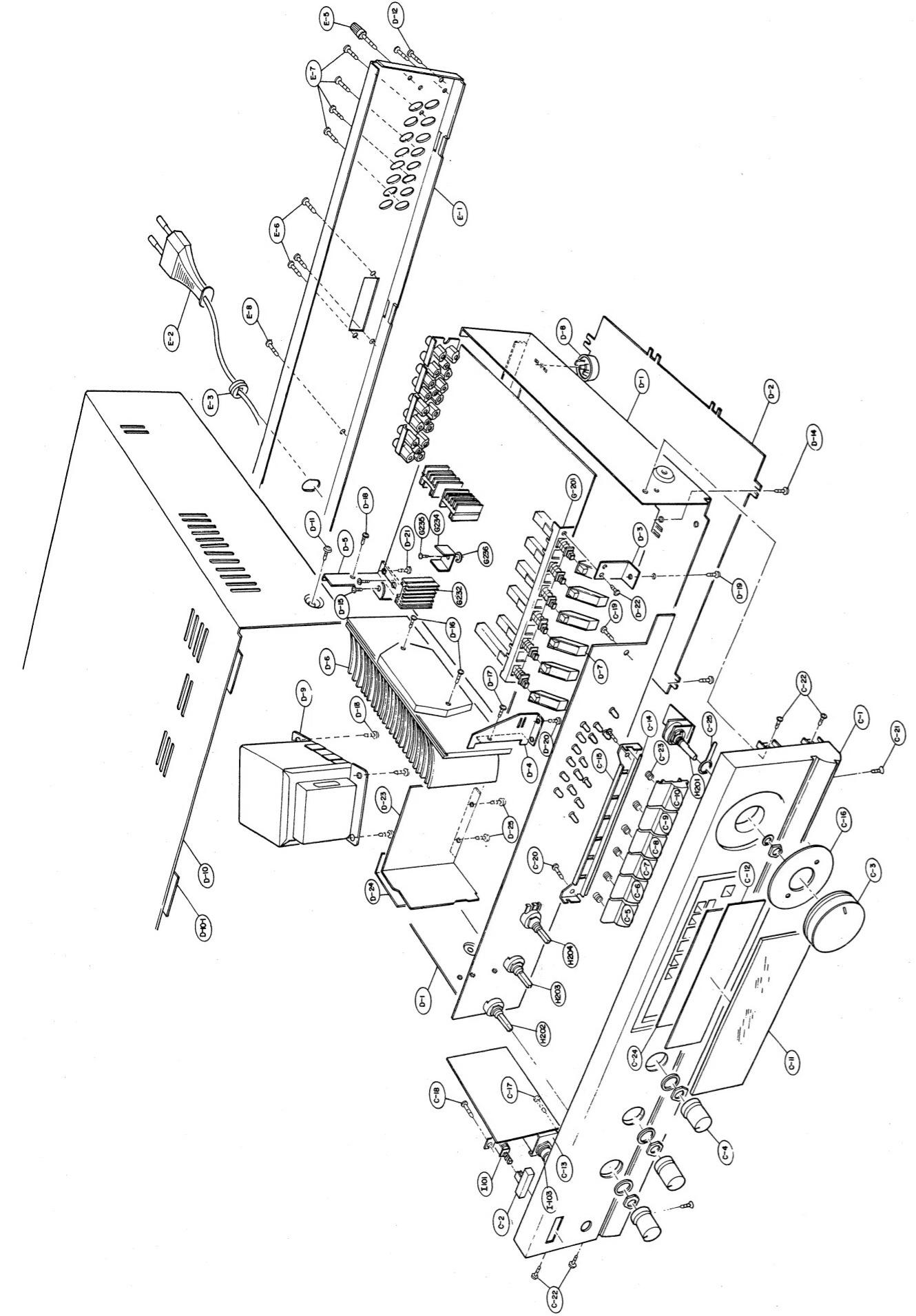
NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K = 1000, M = 1,000,000).  
2. Capacitance values are shown in microfarads unless otherwise (P = MICRO-MICRO FARADS).

## PCB LAYOUT

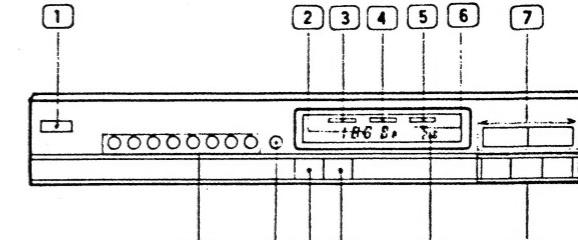
### TONE P.C. BOARD



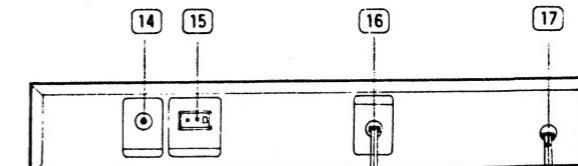
## **NAMES OF CONTROL PARTS**



- 1** POWER Switch
  - 2** FREQUENCY Indicator
  - 3** FM STEREO Indicator
  - 4** AUTO Indicator
  - 5** SEARCH Indicator
  - 6** MEMORY Indicator
  - 7** TUNING Button - UP & DOWN
  - 8** BAND Selector Button - FM, MW & LW
  - 9** STATION PRESET NUMBER Indicator
  - 10** PRESET + 10 Button
  - 11** AUTO MANUAL Buttons
  - 12** MEMORY Button
  - 13** STATION MEMORY Buttons
  - 14** FM ANTENNA Jack
  - 15** MW/LW ANTENNA Jack
  - 16** Fetch Cord
  - 17** AC POWER SUPPLY Cord



**Figure 3 Front View**

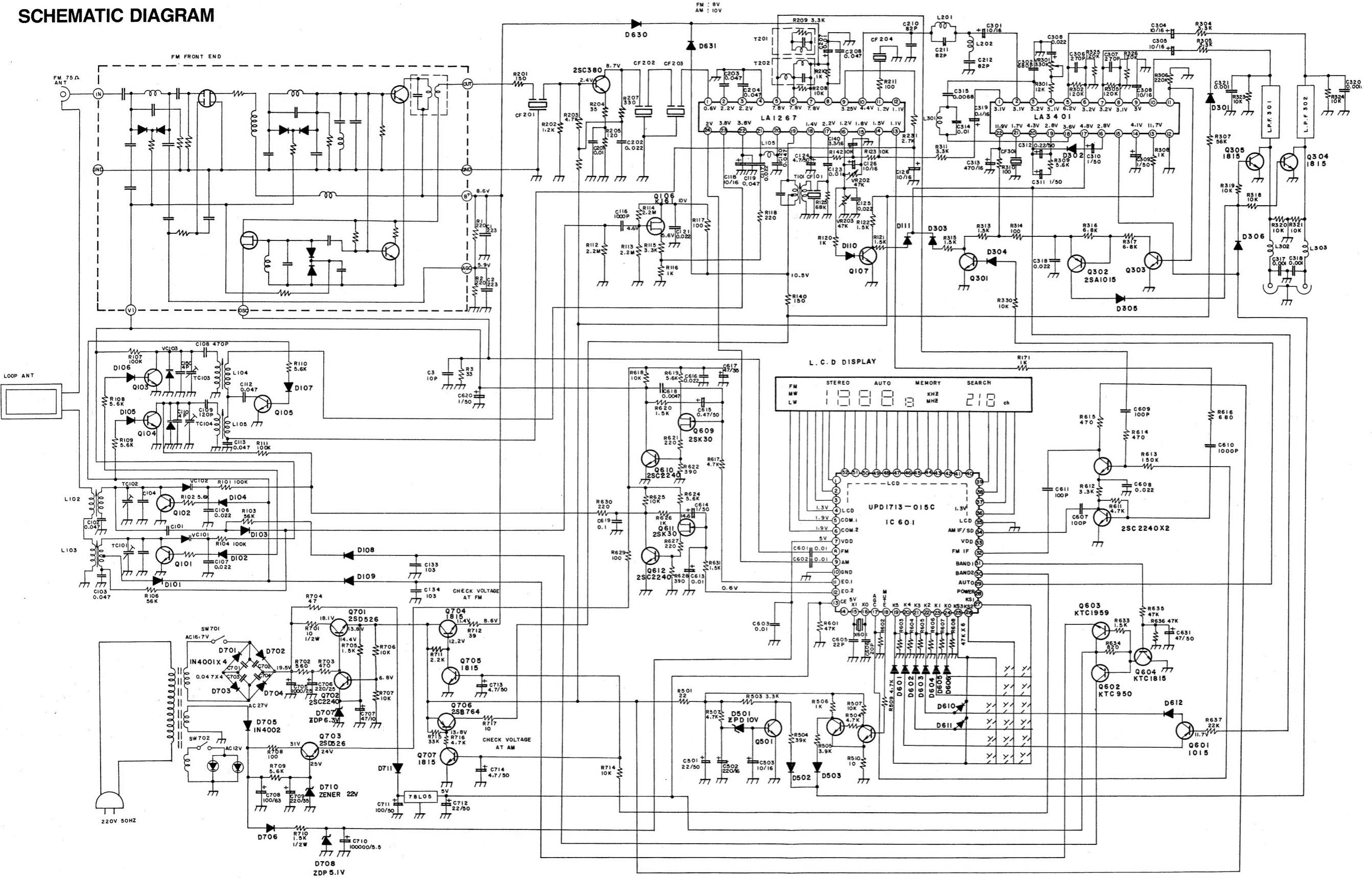


**Figure 4 Back View**

## *Notizen*



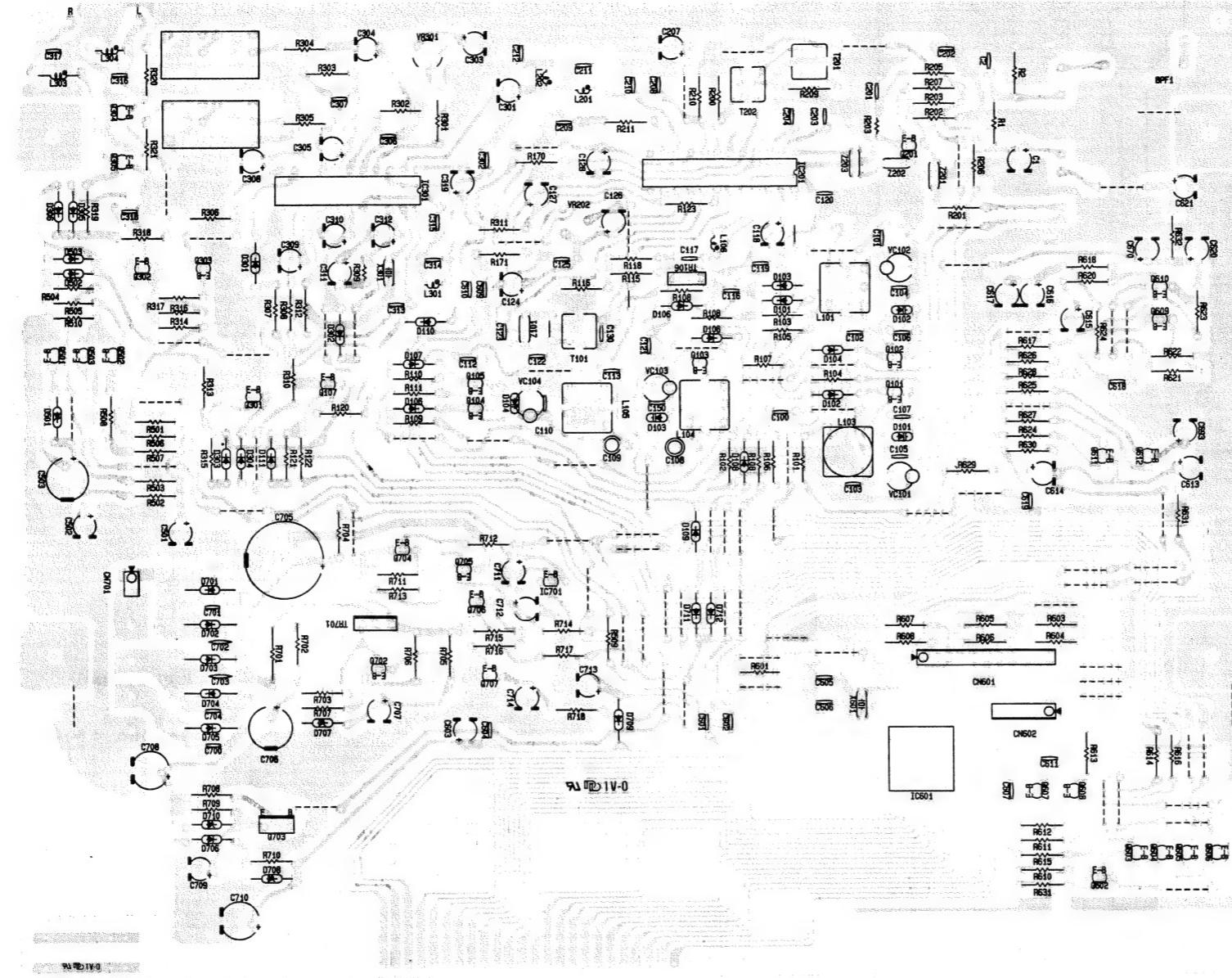
## **SCHEMATIC DIAGRAM**



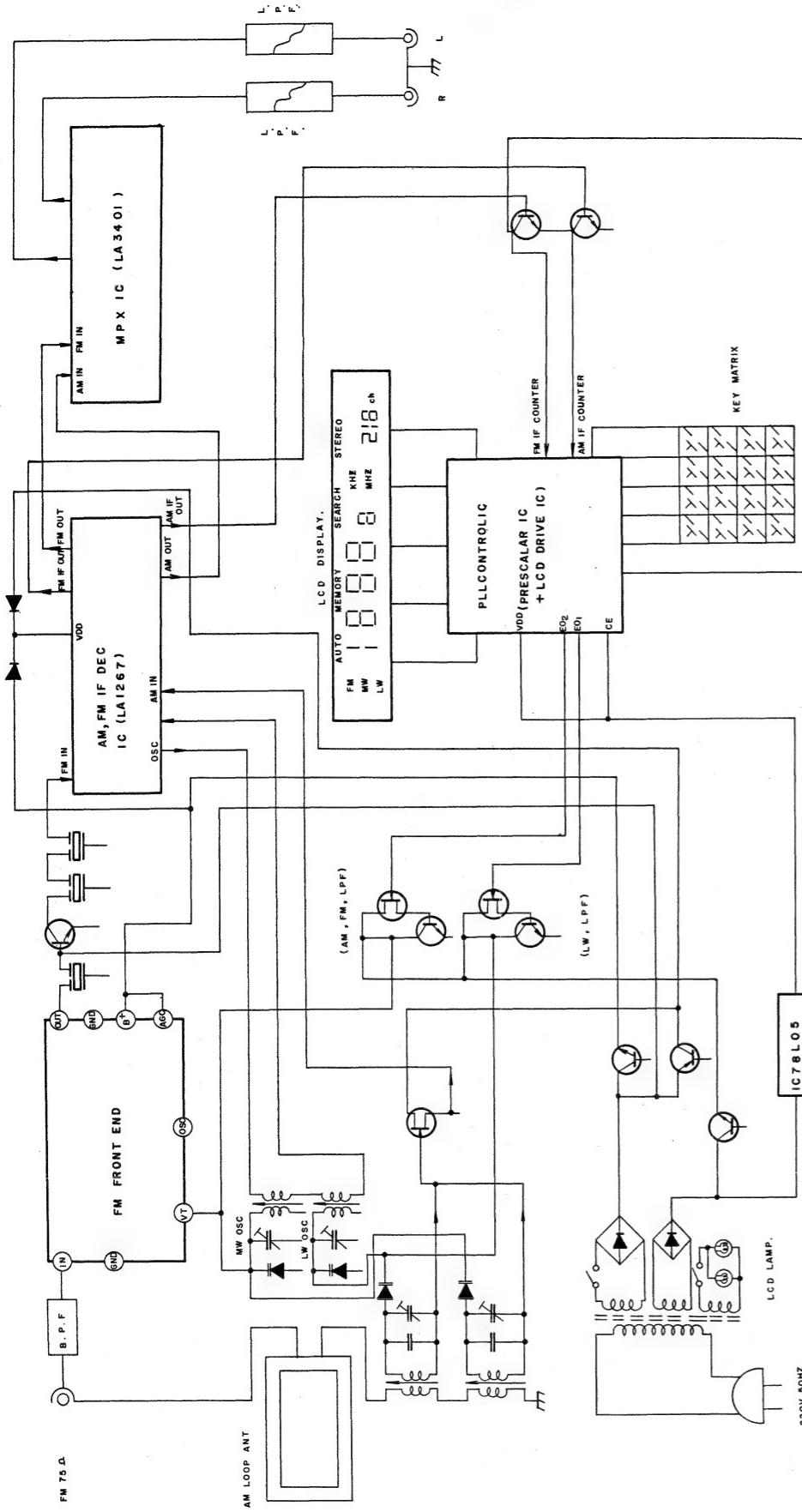
**NOTES:** 1. Resistance values are indicated in ohms unless otherwise specified ( $K = 1000$ ,  $M = 1,000,000$ ).  
2. Capacitance values are shown in microfarads unless otherwise ( $P = \text{MICRO-MICRO FARADS}$ ).

## PCB LAYOUT

### MAIN P.C. BOARD

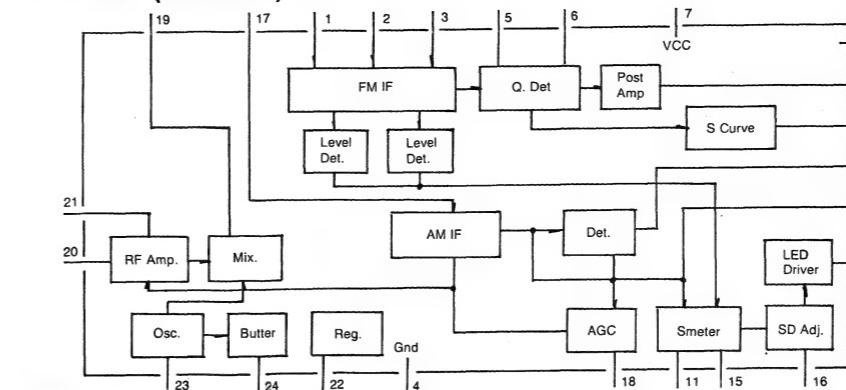


## BLOCK DIAGRAM

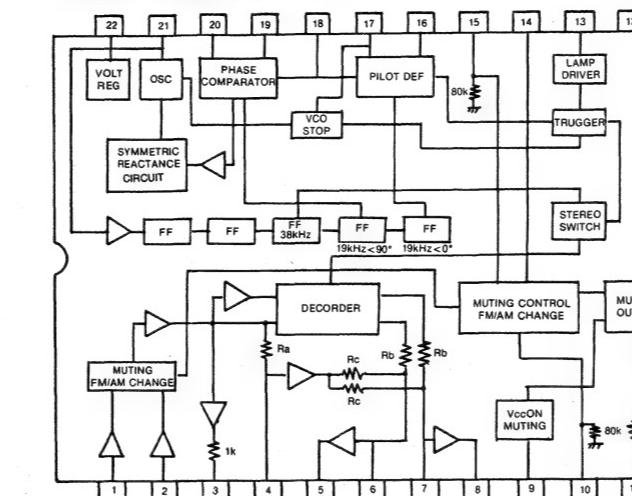


IC EQUIVALENT CIRCUITS

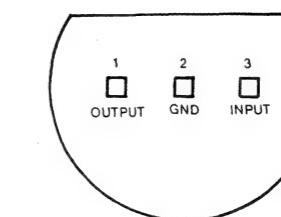
IC101 LA1267 (AM/FM



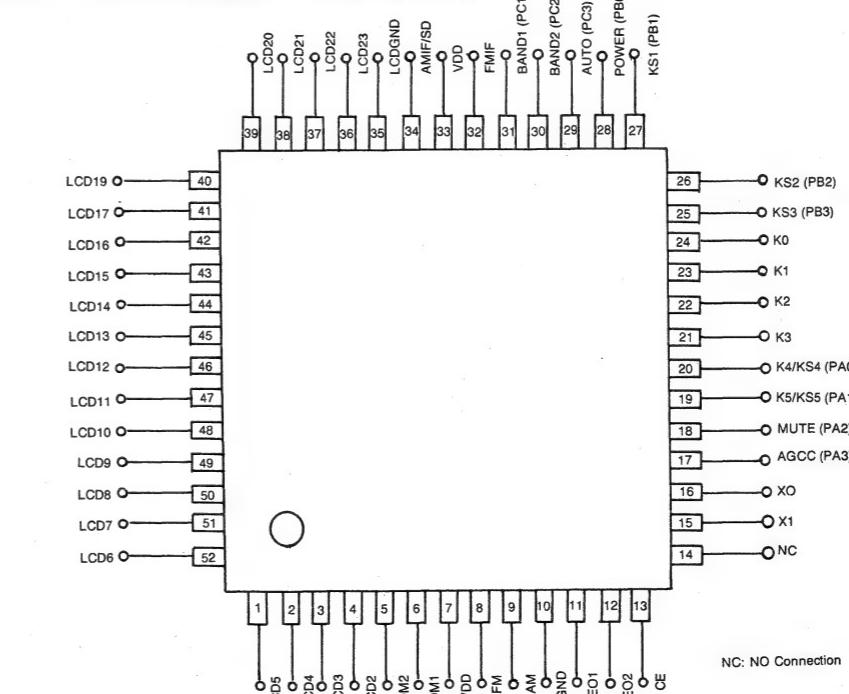
IC301 LA3401 (MI)



IC701 μPC78LO5J (Voltage Regulator)

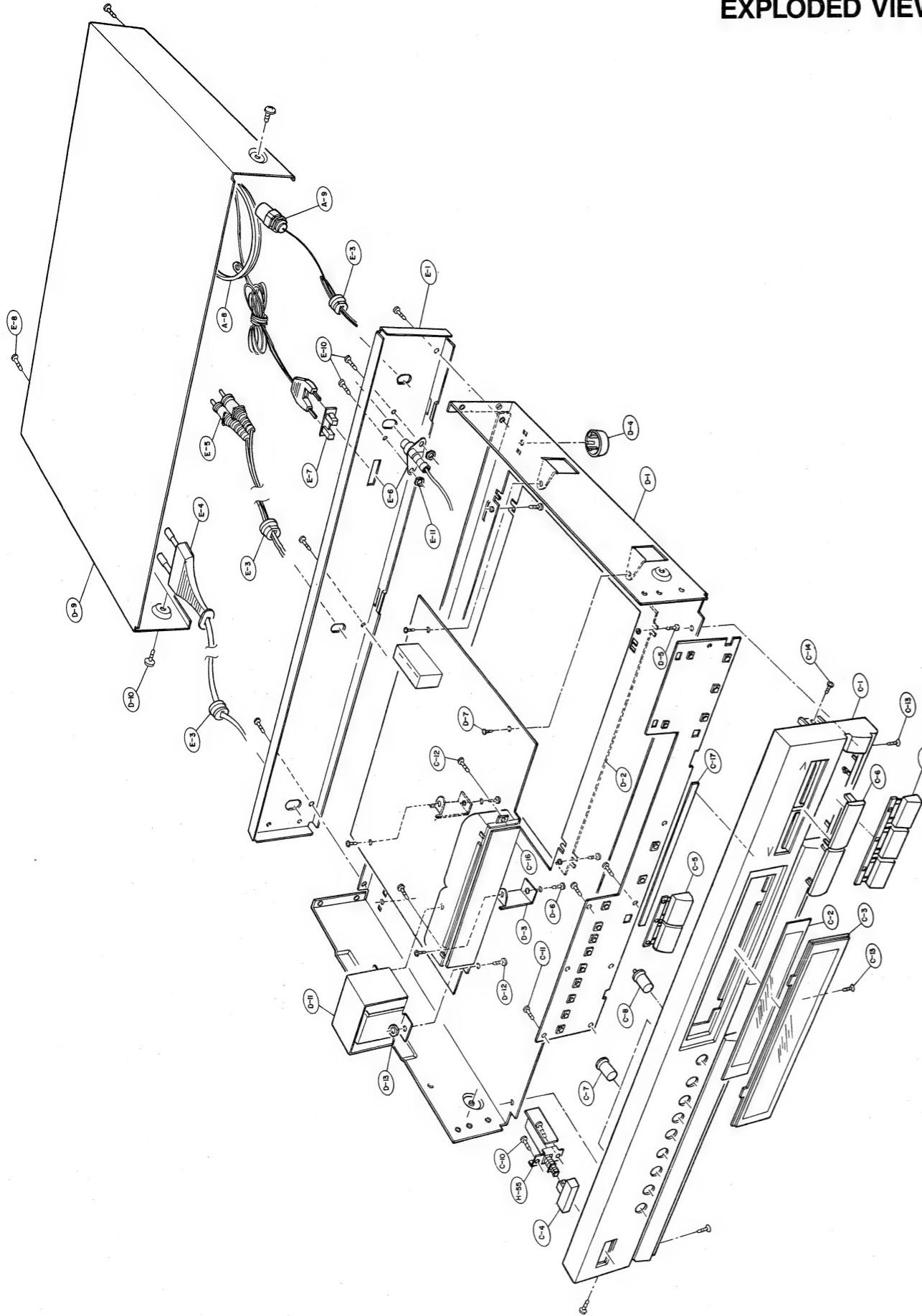


IC601  $\mu$ PD1713AG-015 (Digital Tuning System)



## NAMES OF CONTROL PARTS

### EXPLODED VIEW



- ① POWER Switch
- ② TAPE SELECT Switch
- ③ POWER Indicator
- ④ TAPE COUNTER-B Deck
- ⑤ RECORDING Indicator
- ⑥ DOLBY Indicator
- ⑦ DUBBING Indicator
- ⑧ HI-SPEED Indicator
- ⑨ DOLBY Button
- ⑩ DUBBING Button
- ⑪ HI-SPEED Button
- ⑫ DECK B: Cassette Compartment
- ⑬ DECK B: PAUSE Button
- ⑭ DECK B: STOP/EJECT Button
- ⑮ DECK B: FAST FORWARD Button
- ⑯ DECK B: REWIND Button
- ⑰ DECK B: PLAY Button
- ⑱ DECK B: RECORD Button
- ⑲ DECK A: PAUSE Button
- ⑳ DECK A: STOP/EJECT Button
- ㉑ DECK A: FAST FORWARD Button
- ㉒ DECK A: REWIND Button
- ㉓ DECK A: PLAY Button
- ㉔ DECK A: Cassette Compartment
- ㉕ MIC Jack
- ㉖ PHONES Jack
- ㉗ LINE IN/OUT Jack
- ㉘ AC POWER SUPPLY Cord

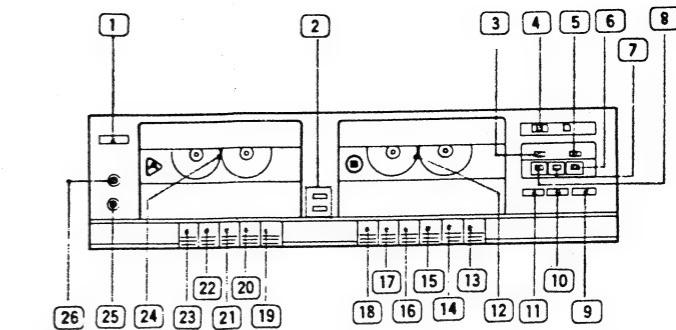


Figure 17 Front View

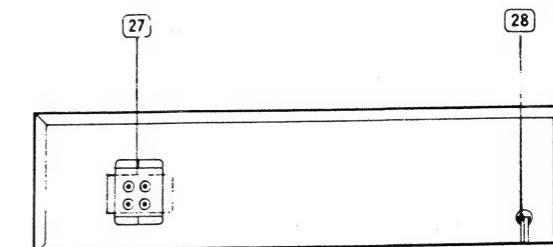
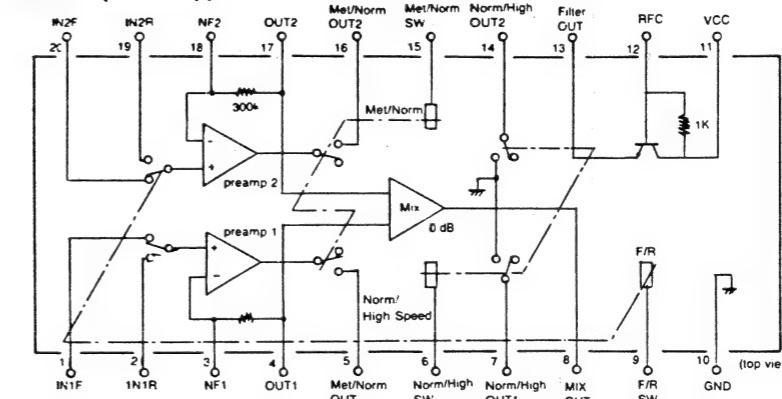


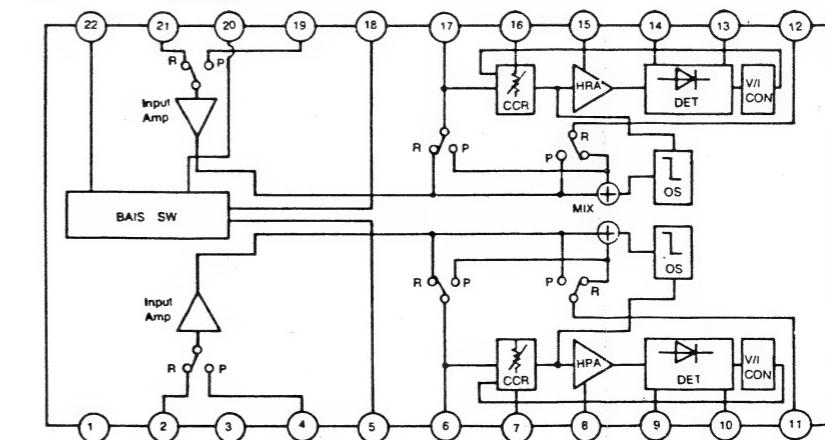
Figure 18 Back View

### IC EQUIVALENT CIRCUIT

IC1 LA3246 (Pre Amp)



IC2 HA12116ANT (Dolby)





#### **10. RECORD/PLAYBACK FREQUENCY RESPONSE**

Deck	Deck Mode	Test Tape	Test Point	Adjust-ment	Input	Adjust For	Remark
Deck B	Record/Playback → Playback	MTT-5511 MTT-5561 MTT-5571	A, B	R301 R302	580mV-25dB	250Hz-10kHz: 3dB 10kHz-12.5kHz: 4dB	Dolby off. Deck A: Stop.

\* Adjust under normal speed, confirm record/playback response of high speed, repeat steps 9 and 10 several times at the same time.

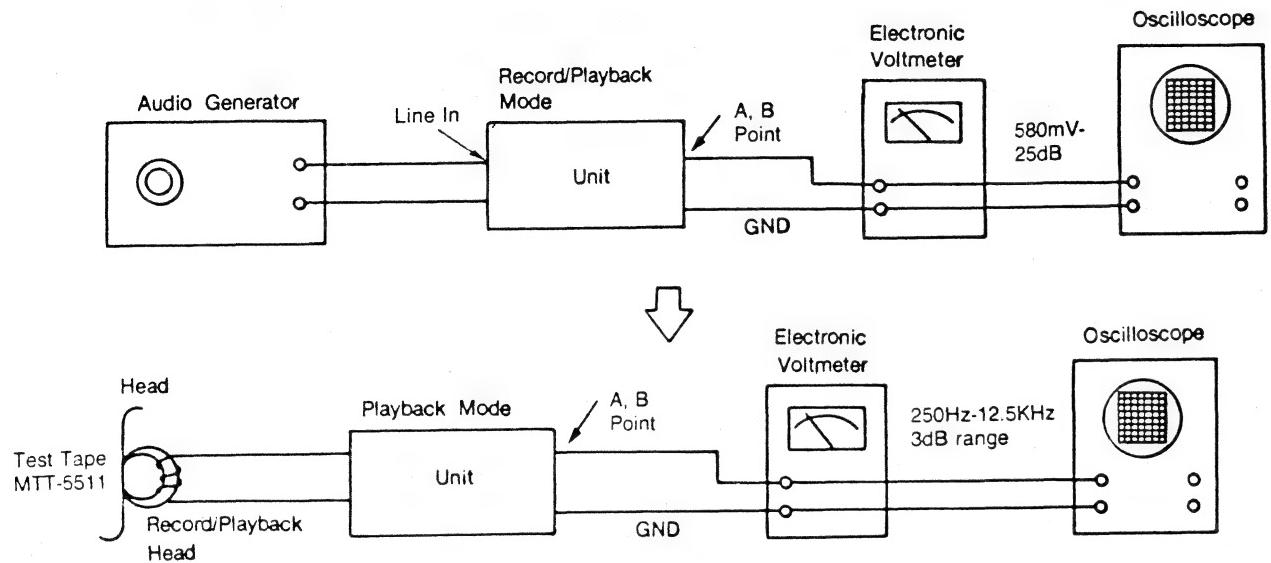
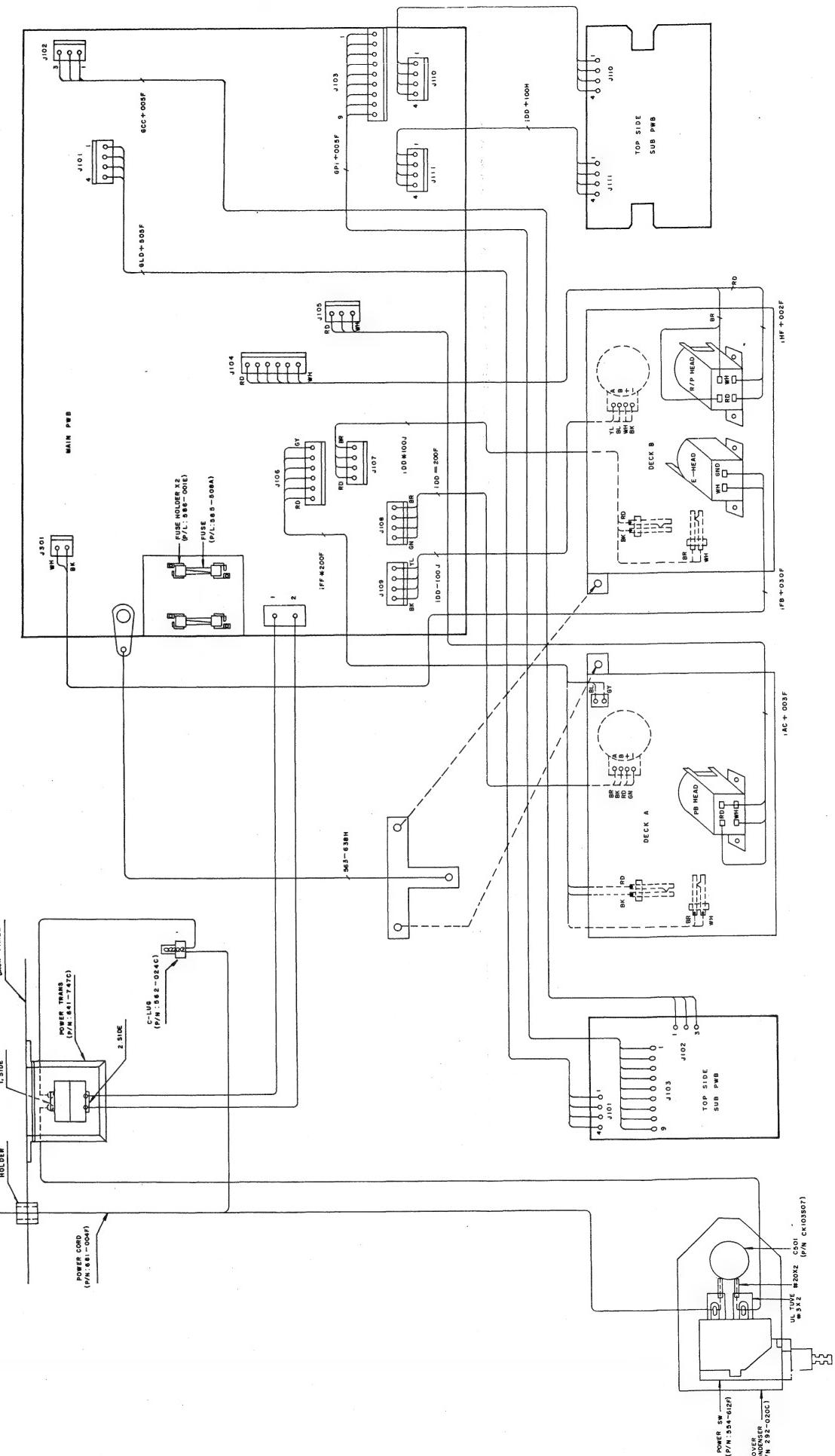


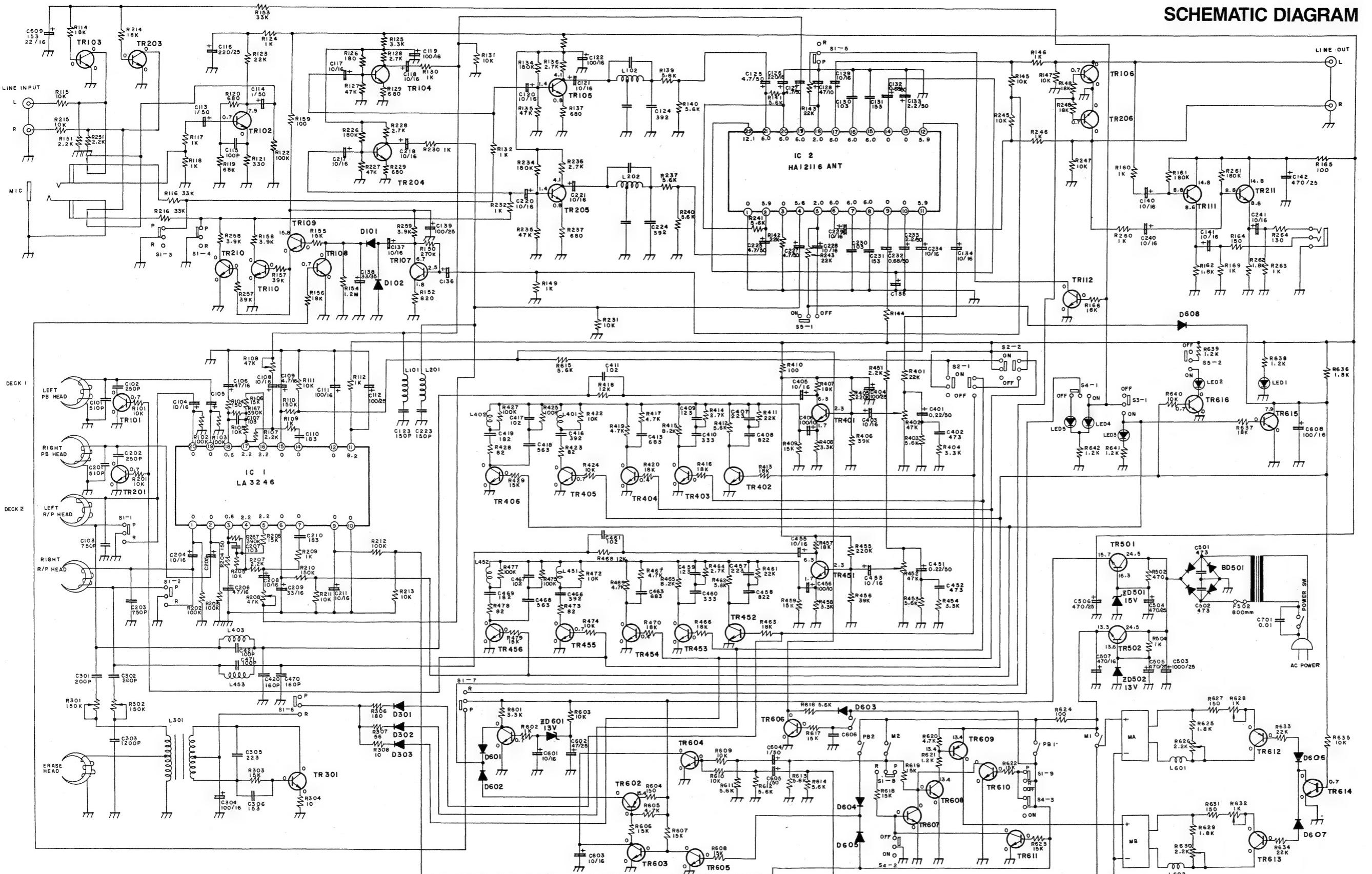
Figure 29 Record/playback Response Adjustment Connection Diagram

## *Notizen*

## **WIRING DIAGRAM**



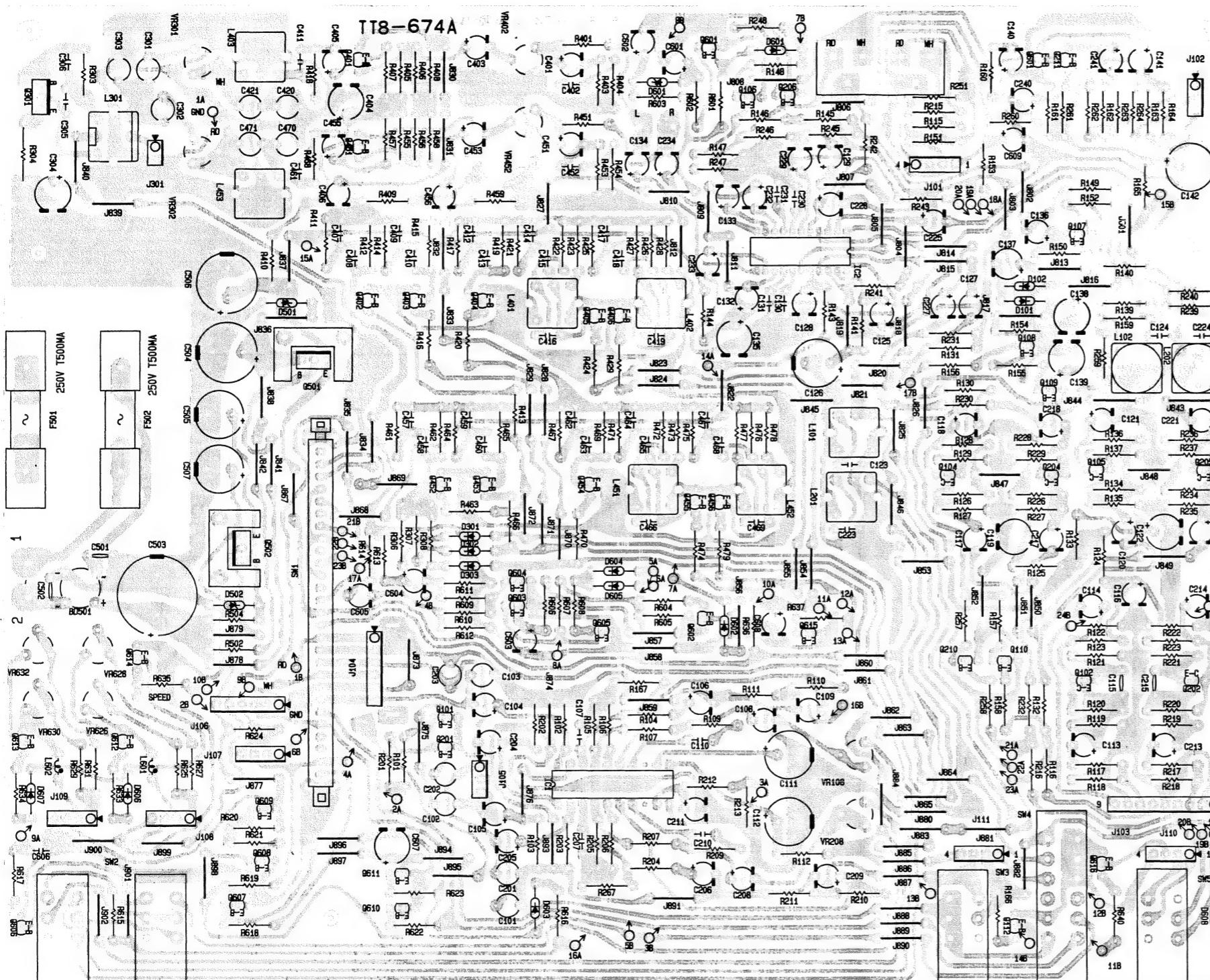
## **SCHEMATIC DIAGRAM**



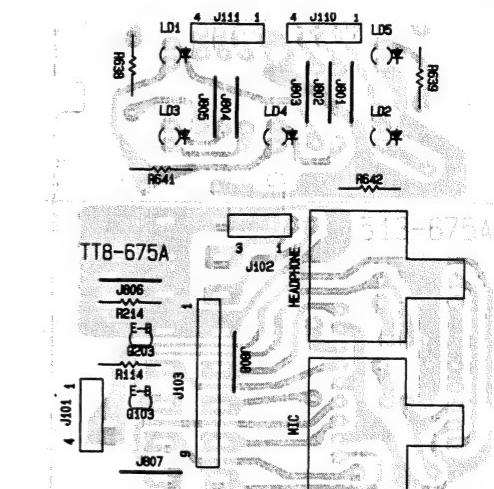
**NOTES:** 1. Resistance values are indicated in ohms unless otherwise specified ( $K = 1000$ ,  $M = 1,000,000$ ).  
2. Capacitance values are shown in microfarads unless otherwise ( $P = MICRO-MICRO FARADS$ ).

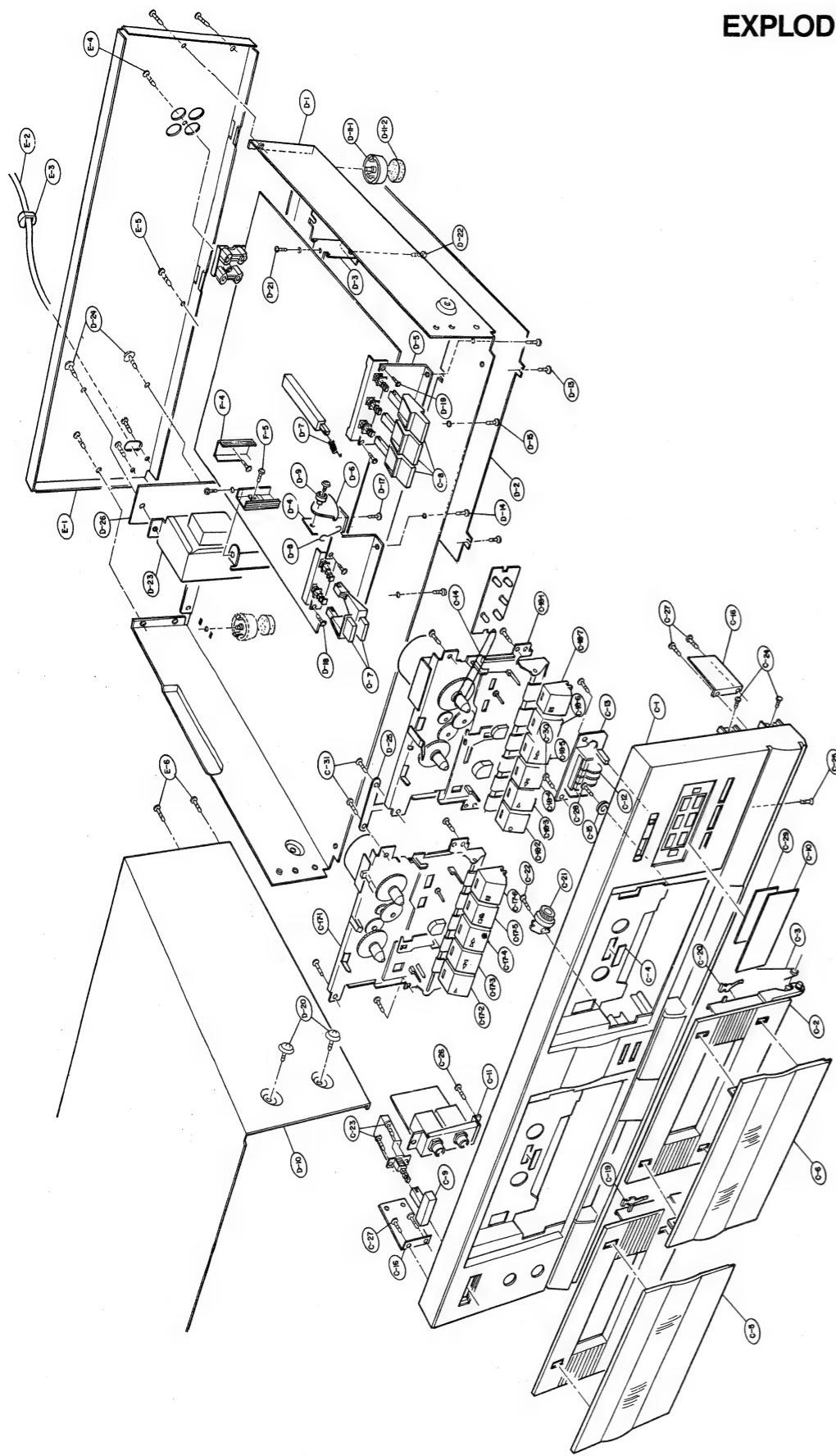
# PCB LAYOUT

## **MAIN P.C. BOARD**



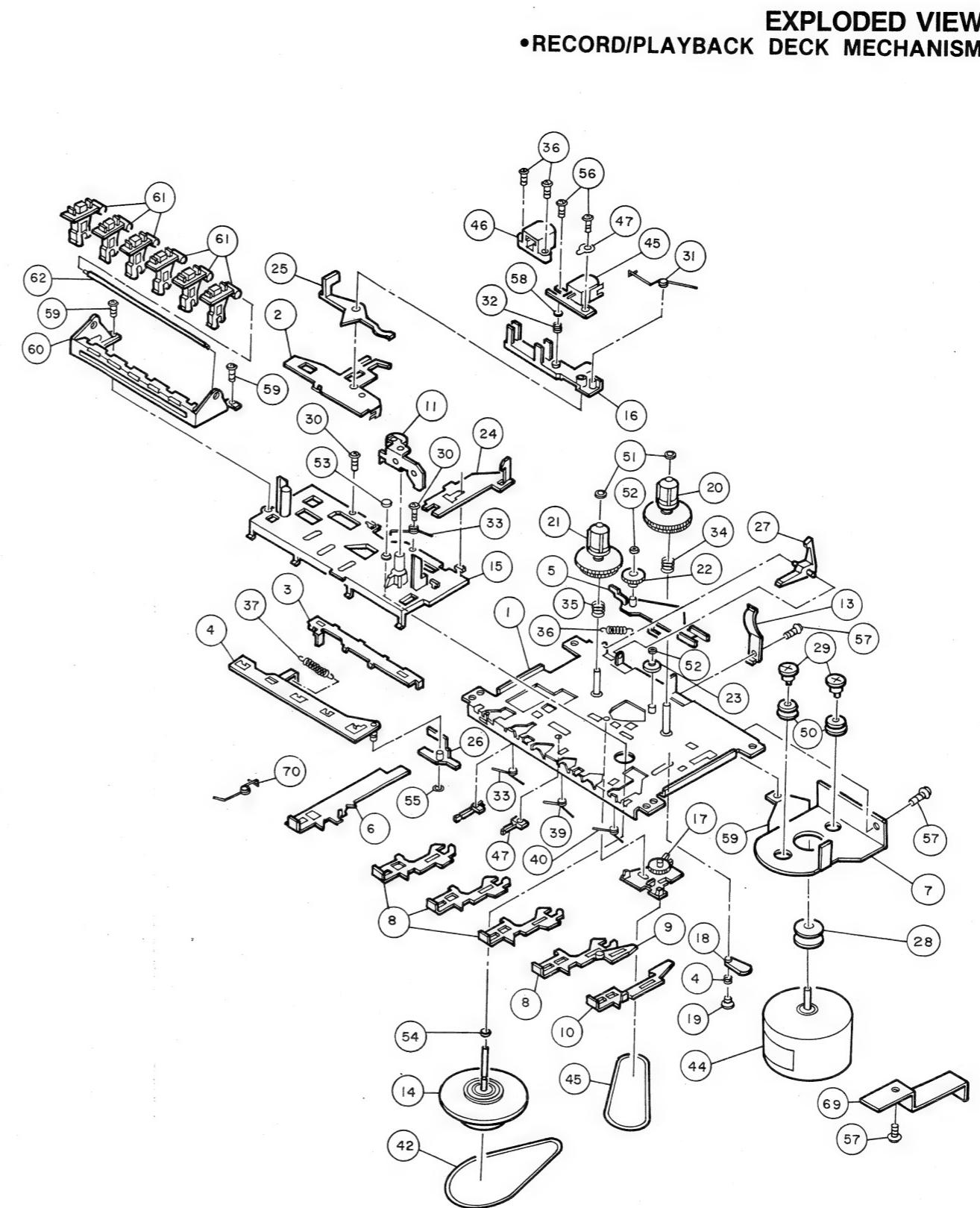
## **MIC, HEADPHONE & LED P.C. BOARD**





## **EXPLODED VIEW**

### **•CABINET**



- RECORD/PLAYBACK DECK MECHANISM

**NOTE:** Excluded parts in the parts list are not available as replacement parts.

# Quelle Technischer Kundendienst

037.2375

BESTELL-NR.	0372375
GERÄTEBEZEICHNUNG	UNIV.-HIFI-SET
WARENGATTUNG	653
AUSFÜHRUNGS-NR.	001
GERÄTEBESCHREIBUNG	
PRIVILEG	VTC 4391
LIEFERANTEN-NR.	201888
PREIS	599.00
KATALOG	893
GARANTIEZEIT	6
KD-SEKTOR	R
HEIM/BRINNE	WERKSTATT
BETreuUNG	EIGEN
KOSTENTRÄGER	EIGEN
REPARATURFAHIG	JA

ZEILE	POSITION	SYM BEZEICHNUNG	ET-NUMMER
1			
2		<u>TUNER :</u>	
3			
4	A8	AM-HILFSANTENNE	743 441 8
5	C1	FRONTBLENDE	744 066 2
6	C2	ABDECKUNG, INNEN	744 067 0
7	C3	KLARSICHTSCHEIBE	744 068 8
8	C4	KNOPF, POWER	744 069 6
9	C5	KNOPFLEISTE, FUNKTION	744 070 4
10	C6	KNOPF, UP-DOWN	744 071 2
11	C7	KNOPF, SPEICHER	744 072 0
12	C8	KNOPF, MEMO	744 073 8
13	C16	FILTERSCHEIBE, DISPLAY	744 074 6
14	C17	HALTELEISTE, KNOPF	744 075 3
15	D4	FUSS	744 076 1
16	D9	GEHÄUSE-OBERTEIL	734 255 3
17	D11	NETZTRAFO	744 077 9
18	E6	FM-ANTENNENBUCHSE 75 OHM	744 078 7
19	E7	AM-ANTENNENBUCHSE	744 079 5
20			
21		<u>ELEKTRISCHE TEILE :</u>	
22			
23		NETZTRAFO	744 077 9
24		UKW-TEIL	743 306 3
25		DISPLAY	744 065 4
26	BPF1	BAND PASS BPF 1	744 063 9
27	CF101	KERAMIK-FILTER	743 305 5
28	CF201-203	FM-KERAMIK-FILTER	733 843 7
29	CF204	AM-KERAMIK-FILTER BFU 450C4N	734 270 2
30	CF301	AM-KERAMIK-FILTER CSB 456F11	734 269 4
31	D101,3,6,9	DIODE 1 SS 132	725 598 7
32	D102,4,5	DIODE 1 S 2472	948 732 3
33	D107,8	DIODE 1 S 2472	948 732 3
34	D110,111	DIODE 1 S 2472	948 732 3
35	D301-305	DIODE 1 S 2472	948 732 3
36	D501	ZENERDIODE ZPD 10	928 937 2
37	D502-631	DIODE 1 S 2472	948 732 3
38	D701-704	DIODE 1 N 4001	176 419 0
39	D705	DIODE 1 N 4002	921 523 7
40	D706,9,11	DIODE 1 S 2472	948 732 3
41	D707	ZENERDIODE ZPD 6,2	176 820 9

ZEILE	POSITION	SYM BEZEICHNUNG	ET-NUMMER
42	D708	ZENERDIODE ZPD 5,1	925 475 6
43	D710	ZENERDIODE ZPD 30	956 002 0
44	IC101	IC LA 1267	734 938 4
45	IC301	IC LA 3401	743 287 5
46	IC601	UPD 1713 AG 015	744 061 3
47	JC701	IC UPC 78 L 05	950 533 0
48	L102	LW-ANTENNENSPULE	734 271 0
49	L103	MW-ANTENNEN-FILTER	743 295 8
50	L104	AM-ZF-FILTER	743 299 0
51	L105	LW-OSZILLATORSPULE	734 273 6
52	L106	HF DROSSEL 39 UH	120 826 3
53	L201,202	DROSSEL	734 992 1
54	L301	DROSSEL 7.5 MH	985 494 4
55	L302,303	DROSSEL 47UH	733 798 3
56	LPF301,302	MPX-FILTER 19 KHZ	743 297 4
57	Q101-5,7	TRANSISTOR 2 SC 1815 GR	947 335 6
58	Q106	TRANSISTOR 2 SK 161-0	732 398 3
59	Q201	TRANSISTOR 2 SC 380	175 437 3
60	Q301,303-5	TRANSISTOR 2 SC 1815 GR	947 335 6
61	Q302,601	TRANSISTOR 2 SA 1015	949 017 8
62	Q501-503	TRANSISTOR 2 SC 1815 GR	947 335 6
63	Q602	TRANSISTOR 2 SC 3199 (GR)	989 833 9
64	Q603	TRANSISTOR 2 SC 1959	949 016 0
65	Q604	TRANSISTOR KTA 950 Y (2 SA 950)	956 495 6
66	Q607,608	TRANSISTOR 2 SC 2240 BL	950 910 0
67	Q609,611	TRANSISTOR 2 SK 30 AY	175 984 4
68	Q610,612	TRANSISTOR 2 SC 2240 BL	950 910 0
69	Q630	TRANSISTOR 2 SA 1015	949 017 8
70	Q701,703	TRANSISTOR KTD 526 Y	730 982 6
71	Q702	TRANSISTOR 2 SC 2240 BL	950 910 0
72	Q704,705,7	TRANSISTOR 2 SC 1815 GR	947 335 6
73	Q706	TRANSISTOR 2 SB 764	732 216 7
74	SW601-617	TAKTSCHALTER	744 064 7
75	SW701	TASTENSCHALTER	742 484 9
76	T101	MW-OSZILLATORSPULE	744 062 1
77	T201	FM-ZF-FILTER	743 300 6
78	T202	FM-ZF-FILTER	743 301 4
79	VC101,103	CAP.-DIODE SVC 321SP-D2	988 694 6
80	VC102,104	CAP.-DIODE SVC 333 A	733 832 0
81	X601	QUARZ 4.5000 MHZ	733 845 2
82			
83		<u>VERSTAERKER :</u>	
84			
85	C-1	NF-VERB.KABEL 2X CINCH JE SEITE	997 609 3
86	C-2	FRONTBLENDE	744 084 5
87	C-3	KNOPF,GROSS	744 085 2
88	C-4	KNOPF,KLEIN	744 086 0
89	C-5	KNOPF,TAPE	744 087 8
90	C-6	KNOPF,CD	744 088 6
91	C-7	KNOPF,TV	744 089 4
92	C-8	KNOPF,AUX	744 090 2
93	C-9	KNOPF,TUNER	744 091 0
94	C-10	KNOPF,PHONO	744 092 8
95	C-11	KLARSICHTSCHEIBE	744 093 6
96	C-12	AUDECKUNG,INNEN	744 094 4
97	C-14	HALTER FUER KNOEPFE	744 095 1
98	C-16	ZIERRING	744 096 9
99	C-23	FEDER	734 243 9
100	C-24	FILTERSCHEIBE	744 097 7
101	D-7	ZWISCHENSTUECK FUER KNOPF	744 098 5
102	D-8	FUSS	744 076 1
103	D-9	NETZTRAFO	744 099 3
104	D-10	OBERTEIL	744 100 9
105			
106		<u>ELEKTRISCHE TEILE :</u>	
107			
108		NETZTRAFO	766 099 3
109		CINCHBUCHSE,BLOCK	733 769 4
110		KOPFHOEHERBUCHSE	734 248 8
111		LAUTSPRECHERANSCHLUSSBUCHSE	744 083 7
112	D451,452	DIODE 1 S 1555	176 507 2
113	D501	BRUECKENGLEICHRICHTER KBP C604	733 797 5
114	D502,513	DIODE 1 N 4001	176 419 0
115	D503	DIODE 1 S 1555	176 507 2
116	D504	ZENERDIODE ZY 13	176 827 4
117	D511,512	ZENERDIODE ZPY 18	928 925 7
118	D514	ZENERDIODE ZPY 12	929 696 3
119	DF301	LEUCHTDIODE SLR 54 UR	965 135 7
120	DF302-306	LED SLR 54 GC3-H	733 765 2
121	DL1-5	LED SLR 54 GC3-H	733 765 2

ZEILE	POSITION	SYM	BEZEICHNUNG	ET-NUMMER
122	DL6		LEUCHTDIODE SLR 54 UR	965 135 7
123	DR1-5		LED SLR 54 GC3-H	733 765 2
124	DR6		LEUCHTDIODE SLR 54 UR	965 135 7
125	IC101,102		IC KJA 75558 P	740 799 2
126	IC301,302		IC KA 2281	740 210 0
127	IC401		IC STK 4171 II	733 796 7
128	Q451-453		TRANSISTOR 2 SA 949	953 951 1
129	Q454		TRANSISTOR 2 SC 2229	951 671 7
130	Q501,503		TRANSISTOR KTD 526 Y	730 982 6
131	Q502		TRANSISTOR KTB 596	742 553 1
132	R451,452		WIDERSTAND 0.22 OHM 3 WATT	733 802 3
133	SW-FUNKT.		TASTENSATZ 6-FACH	734 245 4
134	SW501		NETZSCHALTER	742 527 5
135	VR201,LAUT		DREHPOTI 2X100KB	744 080 3
136	VR202,203		DREHPOTI 2X100KC	744 081 1
137	VR204,BAL.		DREHPOTI 250KW	744 082 9
138				
139			<u>DOPPEL-TAPE-DECK :</u>	
140				
141	C-1		FRONTBLEINDE	744 101 7
142	C-2		CASSETTENFACH	744 102 5
143	C-3		FEDER,AUSWURF	744 103 3
144	C-4		REFLEKTOR	744 104 1
145	C-5		CASSETTENFACHDECKEL,LINKS "A"	744 105 8
146	C-6		CASSETTENFACHDECKEL,RECHTS "B"	744 106 6
147	C-7		KNOPF,CRO-METAL	744 107 4
148	C-8		KNOPF,SPEED-DOLBY	744 108 2
149	C-9		KNOPF,POWER	744 069 6
150	C-10		KLARSICHTSCHEIBE	744 109 0
151	C-12		ZAEHLWERK	734 349 4
152	C-14		RIEMEN	744 110 8
153	C-17-1		LAUFWERK,WIEDERGABE	744 111 6
154	C-17-2		KNOPF,PLAY	744 112 4
155	C-17-3		KNOPF,REW	744 113 2
156	C-17-4		KNOPF,FF	744 114 0
157	C-17-5		KNOPF,STOP-EJECT	744 115 7
158	C-17-6		KNOPF,PAUSE	744 116 5
159	C-18-1		LAUFWERK,A/W	744 117 3
160	C-18-2		KNOPF,PLAY	744 112 4
161	C-18-3		KNOPF,REW	744 113 2
162	C-18-4		KNOPF,FF	744 114 0
163	C-18-5		KNOPF,STOP-EJECT	744 115 7
164	C-18-6		KNOPF,PAUSE	744 116 5
165	C-18-7		KNOPF,REC	744 118 1
166	C-20		BLATTFEDER,CASS.DECKEL	998 342 0
167	C-21		DAEMPFER	744 119 9
168	D-10		GEHAEUSE-OBERTEIL	734 318 9
169	D-11		FUSS	744 076 1
170	D-23		NETZTRAFO	744 121 5
171				
172			<u>ELEKTRISCHE TEILE :</u>	
173				
174			NETZTRAFO	744 121 5
175	MIC		MIKROFONBUCHSE	733 882 5
176	KH		KOPFHÖRERBUCHSE	733 883 3
177			CINCHBUCHSE,BLOCK	733 769 4
178	BD501		GLEICHRICHTER WN-005	949 381 8
179	D101,102		DIODE 1 S 2472	948 732 3
180	D301-303		DIODE 1 N 4001	176 419 0
181	D601-607		DIODE 1 S 2472	948 732 3
182	IC1		IC LA 3246	742 674 5
183	IC2		IC HA 12116 ANT	743 288 3
184	L101,201		SPULE	742 961 6
185	L102,202		FILTER	743 298 2
186	L301		LOESCHOSZILLATORSPULE	740 795 0
187	L401,402		DROSSEL	733 875 9
188	L403,453		SPULE	742 961 6
189	L451,452		DROSSEL	733 875 9
190	L601,602		DROSSEL	733 877 5
191	LD1,5		LEUCHTDIODE SLR 54 UR	965 135 7
192	SW,POWER		NETZSCHALTER	742 527 5
193	SW1,A/W		A/W-SCHIEBESCHALTER	744 126 4
194	SW2,SELECT		TASTENSATZ 2-FACH	744 127 2
195	SW3-5,M/H		TASTENSATZ 3-FACH	744 528 1
196	LD2-4		LED SLR 54 GC3-H	733 765 2
197	TR101,103		TRANSISTOR 2 SC 1815 GR	947 335 6
198	TR102,105		TRANSISTOR MPS 9635 C	733 874 2
199	TR106-109		TRANSISTOR 2 SC 1815 GR	947 335 6
200	TR110,210		TRANSISTOR 2 SC 732	175 850 7
201	TR111-203		TRANSISTOR 2 SC 1815 GR	947 335 6
202	TR205		TRANSISTOR MPS 9635 C	733 874 2
203	TR206,211		TRANSISTOR 2 SC 1815 GR	947 335 6
204	TR301		TRANSISTOR 2 SD 880-Y	986 666 6
205	TR401,451		TRANSISTOR 2 SC 732	175 850 7
206	TR403-406		TRANSISTOR 2 SC 1815 GR	947 335 6
207	TR453-456		TRANSISTOR 2 SC 1815 GR	947 335 6

ZEILE	POSITION	SYM	BEZEICHNUNG	ET-NUMMER
208	TR501,502		TRANSISTOR KTD 526 Y	730 982 6
209	TR601,3-B		TRANSISTOR 2 SC 1815 GR	947 335 6
210	TR602		TRANSISTOR 2 SA 1015	949 017 8
211	TR609		TRANSISTOR BC 636-16 ERSETZT ET-NR. 949 018 6	952 194 9
212	TR610,611		TRANSISTOR 2 SC 1815 GR	947 335 6
213	TR612,613		TRANSISTOR 2 SA 1015	949 017 8
214	TR614-616		TRANSISTOR 2 SC 1815 GR	947 335 6
215	ZD501		ZENERDIODE ZD 15	175 643 6
216	ZD502,601		ZENERDIODE ZY 13	176 627 4
217				
218			<u>CASSETTE LAUFWERK :</u>	
219				
220			LAUFWERK, WIEDERGABE	744 111 6
221			LAUFWERK, A/W	744 117 3
222	11		GUMMIANDRUCKROLLE	744 530 7
223	14		SCHWUNGMASSE	744 531 5
224	17		RUTSCHKUPPLUNG	744 534 9
225	20		AUFWICKELTELLER	744 532 3
226	21		ABWICKELTELLER	744 533 1
227	22		ZAHNRAD, VORLAUF	744 535 6
228	24		AUSWURFHEEBEL	744 543 0
229	27		AUFGNAHMESPERRE	744 540 6
230	28		MOTORPULLY	744 536 4
231	31		FEDER AUTOSTOP	744 546 3
232	33		FEDER, ANDRUCKROLLE	744 537 2
233	34		FEDER	733 267 9
234	35		FEDER	733 263 8
235	42		ANTRIEBSRIEMEN	744 538 0
236	43		RIEMEN	744 539 8
237	44		MOTOR, MABUCHI EG500KD-2B, 12V CCW	740 381 9
238	45		A/W-KOPF	744 122 3
239	46		LOESCHKOPF	744 123 1
240	47		MIKRO-SCHALTER	744 124 9
241	48		MIKRO-SCHALTER	744 125 6
242	51		SICHERUNGSSCHEIBE 1,2X3X0,25 MM	986 045 3
243	52		SICHERUNGSSCHEIBE 1,5MM	947 800 9
244	61		KNOPFAUFNAHME	744 541 4
245	62		STANGE	744 542 2
246			MIKROSCHALTER	744 529 9

ENDE